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Adding Agility to Department of Navy Acquisition Workforce Management in Digital Collaboration Centers

Clark, Altyn

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Altyn Clark—is a troubleshooter whom leaders call to diagnose ambiguity and craft a way ahead to address wicked DoN problems. He uses the engineering design process, coupled with industrial psychology and methods of large-scale change, to assess and advance organizational systems. As Chief Solutions Officer of TSI, Dr. Clark invents practical and useful models, methods, approaches, and tools. Dr. Clark brings over 30 years of subject matter expertise in engineering, quality control and assurance, program and personnel management, research, logistics, human capital and strategic management. Dr. Clark received his PhD, MS, and BS all from Virginia Tech. [ac@transformationsystems.com]

Introduction

The Department of Navy (DoN) spends $7 billion annually on salaries and benefits for the acquisition workforce (AWF) that manages about $60 billion of expenditures across a Future Years Defense Program. To help develop smart buyers who understand that every person matters, every day matters, and every dollar matters, the DoN Director, Acquisition Career Management (DACM), has created paper-based and digital war rooms to promote ready, relevant lateral learning across programs and career fields. In aid of managing the acquisition workforce like a major acquisition program, DACM uses the war rooms to promote case study discussion of successful and failed programs; to enable Naval leaders to explore feedback loops and unintended consequences of workforce policy decisions; to develop approaches to better understand workload planning, affordability, and willingness to pay; to investigate organizational system problems in the context of larger systems; to develop a more comprehensive view of workforce health; and to develop cross-career field and cross-SYSCOM career navigators, career guides, and career paths.

The ASN (RD&A) Program Managers' War Rooms

The ASN (RDA) Program Managers Workshop was created in October 2014 to instruct the Navy's program managers and senior acquisition personnel in the history of Navy acquisition and examples of successful Navy program management. Since its creation, the workshop has instructed hundreds of program managers and senior acquisition personnel from over 70 different program offices. The workshop is an intensive five-day course of instruction wherein students are exposed to information relevant to their acquisition duties in the areas of U.S. Naval organization and history, U.S. military material procurement, major program management, and shipbuilding-specific roles and responsibilities. The course material is presented in seven paper-based War Rooms.

1. Evolution of the Navy War Room: Chronicles the evolution of our Navy over its history, with analyses at critical junctures in time.
2. Organization of the Navy War Room: Presents the organizational evolution of the Navy and how it is set up to operate and fight, mobilize, and maintain the Navy.
3. Material & Acquisition War Room: Views the evolution of the Navy's and the nation's material establishment and acquisition history since our founding. Students get an intimate feel for the events of the day as they actually occurred (in many cases different from the conventional history). Provides insights into what might be needed in the next 30 years.

4. Shipbuilding and Modernization War Room: Addresses the unique requirements and challenges of naval shipbuilding and naval systems development.
5. Program Management War Room: Examines how to meet the challenges of a major acquisition program through its life cycle, using the history, lessons, and tenets of three of the Navy's most successful acquisition programs in the modern era: POLARIS, AEGIS, and F/A-18. Also includes a short vignette for program managers on technology and program protection challenges due to cybersecurity threats, supply chain malfeasance, and increasing DoD program protection requirements.
6. Main War Room/CG(X) Case Study: Explores the national and international forces that shape Navy thinking. Provides a comprehensive view of the numerous dimensions and conditions in which a program manager must operate. Includes a postmortem analysis of the U.S. Navy's CG(X) Program.
7. Naval Aviation War Room: Ships are different, so we created a Naval Aviation war room to teach programmatic differences for aircraft that takeoff from and land on ships.

The instruction in each war room also emphasizes four strategic levels of effort:

- Deliver Lethal Capacity
- Increase Agility
- Drive Affordability
- Build a Workforce to Compete and Win

The War Rooms are replete with examples that illustrate the tension that exists between individual acquisition themes, and the trade-offs among them. This course has been characterized as being, "more about experience than academics." The instructors actively encourage the students to share their experiences and points of view in extended discussions. Daily wrap up and course critique sessions are conducted at the end of each day to focus on the lessons gleaned from the instruction, and to share additional lessons based on the experiences of the students in their own programs.

Development of Digital War Room Capability

The ASN (RD&A) COMPASS Room in Crystal City, VA, has an electronic display system called Mezzanine, which consists of 18 vertical large screen panels and three horizontal panels allowing users to immerse themselves in data with layered data displays and multimedia capability. The system is designed to be collaborative, allowing multiple users to connect with their devices via WiFi or HDMI cable to add content to a workspace or to make virtual "sticky notes" to content during a working session. At the end of a working session, the workspace data can be downloaded in an Adobe portable data file (PDF) for archiving and sharing electronically. The bottom line is that the COMPASS Room display system allows us to see and share information simultaneously, so it can be compared and analyzed side-by-side.

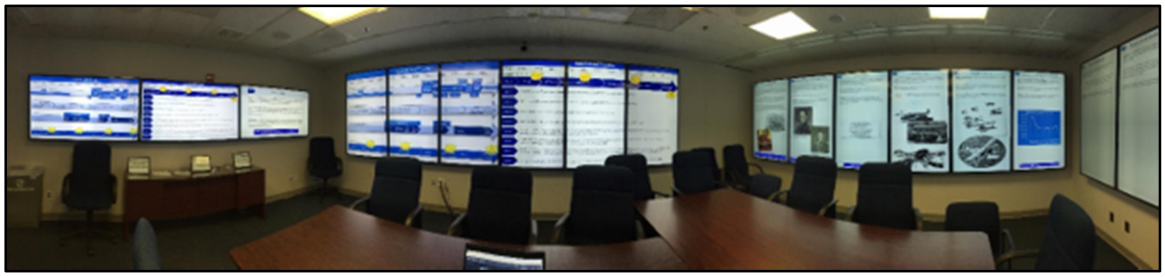

Figure 1. ASN (RD&A) COMPASS Room

- Each display panel can hold up to 50 images.
- Images can be resized and moved across multiple display surfaces.
- Video streams can be shared from your own devices wirelessly or via HDMI cables and shared across multiple display screens.
- Mark up workspace content from your smart phone or tablet.
- Save workspace content for later discussion.
- Upload graphics and PDFs to workspaces.
- Interact with any screen from anywhere in the room with the spatial wands.
- Focus attention using the wand as a pointer.
- Real-time interaction.

The Naval Aviation war room, developed in 2017, was designed with the COMPASS Room in mind rather than paper-based as the previous war rooms. DACM has a plan to convert all the existing paper-based war rooms into the digital format.

The Acquisition Workforce War Room

The DoN is strong at teaching technical excellence and capturing technical lessons learned, as evidenced by the traditional paper-based (and soon to be digital) acquisition program war rooms developed by ASN (RD&A) and used to train future program managers. The DoN has been less strong at systematic civilian leadership development and workforce management lessons learned, which drove ASN (RD&A) through DACM to create an Acquisition Workforce (AWF) war room to complement the program rooms. Design of the AWF war room coincided with installation of a digital display system in the COMPASS Room to replace paper-based presentations.

The content of the AWF war room includes an historical AWF timeline, beginning in 1794 when Joshua Humphreys was the only acquisition workforce member (now there are about 60,000!) responsible for acquiring the Navy's first six frigates. The timeline traces AWF evolution and lessons from Six Frigates through the Board of Navy Commissioners, the Bureaus, the First Expansion, the advent of Naval Aviation, the time Between the Wars 1920–1940, the Second Expansion, the emphasis on Research & Development, an AWF Transition, the Fall of the Berlin Wall, the 21st Century AWF, and into today with Naval Aviation—the F-35.

The AWF war room content operationalizes the Acquisition Career Council (ACC) charter elements into semi-standard templates for each career field to promote information-sharing and collaboration across career field national leaders and their action teams. DACM has leveraged the COMPASS Room capabilities to build career field and SYSCOM-specific workspaces detailing the linkages to other career fields and to the DoN AWF Strategic Plan objectives. DACM also identified leadership characteristics needed by every AWF member

in all career fields: personal mastery, interpersonal mastery, organizational mastery, and motivational mastery. Career field national leads are using the AWF war room to develop career planning guides; measures of productivity, innovation, technical excellence, and professional excellence; prioritized implementation and action plans; and AWF models and measures—all with the aim of understanding and improving the long-term health of the AWF.

Visibility for Feedback Loops and Unintended Consequences

A separate ARS 2018 paper by Ford and Clark uses system dynamics models to characterize decisions made about the AWF, incorporating feedback loops and unintended consequences.

Visibility for Governance

A separate ARS 2018 paper by Clark and Rosa discusses the ASN (RD&A) governance structure that guides strategic shaping and development of the AWF through National Career Field Leaders.

Visibility for SYSCOM Manpower Planning Models

Warfighting system demand signals articulated in U.S. National Strategy documents, such as the DoN 30-year shipbuilding plan, generate a certain amount of acquisition work that must be accomplished to get capability into the hands of warfighters. The DoN has allocated various domains of acquisition work among several acquisition System Commands (SYSCOMs).

Each SYSCOM uses a tailored approach to translate warfighting system demand signals in their domain into a sequenced volume of work to be accomplished. Each SYSCOM's tailored approach estimates how many people (with appropriate knowledge and experience levels) are needed to perform that volume of work. DoN DACM has expressed a need for ASN(RD&A) to have a more integrated view of these SYSCOM manpower estimates to promote the ability to defend AWF size and conduct trade-offs when required.

Each of the major SYSCOMs has its own approach to translate demand signals into defendable workforce requirements. We do not suggest that all commands should adopt a single standard approach; however, we believe there are some criteria that each approach should adhere to in order to permit integration and decision-making at the enterprise level. We describe these criteria below. We recommend that each SYSCOM self-assess its unique approach against these criteria and if warranted, adopt a plan to address any opportunities for improvement they discover.

<u>Manpower Data/Requirements Output Criteria</u>

1. Explicit Assumptions: The manpower model/process uses operational and organizational assumptions fully revealed without vagueness, implication, or ambiguity.
2. Integrate-able Across the DoN: The manpower model/process produces requirements fully synchronized and integrated with requirements of other program or project resource providers external to SYSCOM.
3. Repeatable and Traceable: The manpower model/process is based on methodology that is not dependent on a single knowledgeable individual for execution; it can be repeated by different individuals and uses data that is traceable back to the original data source.
4. Longitudinal Data Using Common Data Elements: The manpower model/process uses common data elements that include category (CIV,

MIL, KTR), Career Field, total number of FTEs, pricing per FTE, career level, location of work, and capability being supported; using historical data across prior requirements cycles instead of estimates from prior POMs.

Workload Drivers Criteria

5. Defined Workload Drivers: The manpower model/process uses defined workload activity drivers and indicates the type of workforce and skills needed to complete tasks. Aspects to consider include each task's priority level; the required skill mix for task completion; demand patterns; whether there is a shortage in the skillset; and any uncertainty and variation associated with timing.
6. Aligned Priorities (CNO, DoD, WH, etc.): The manpower model/process–defined organizational priorities align to higher echelon priorities used in trade space analysis.
7. Flexible Process: The manpower model/process is flexible and can update mid-POM Cycle based on changing priorities without restarting the whole process.
8. Scalable Process: The manpower model/process demonstrates how FTE requirements adjust up and down based on change in priorities and impact on demand signal.
9. Accounts for Impact to Demand Signal: The manpower model/process has feedback loops linking capabilities demand signal requirements with workforce requirements.
10. Address Operations Impact: The manpower model/process addresses mission impact if less than 100% manning is funded and permits trade space decision analysis.
11. Based on Standard Work Packages: The manpower model/process uses defined and verified measures (work packages) of required FTE's and man-years to complete a micro-product (task below intermediate product).

Risk Management and Trade-Off Analysis Criteria

12. Addresses Risk: The manpower model/process defines and analyzes alternative manpower distributions with their operational and resource implications and the evaluations of various trade-off options.
13. Considers Mission Breaking Point: The manpower model/process identifies a manning level at which the program/project cannot meet mission requirements.
14. Minimum Sustainment: The manpower model/process expresses minimum FTEs to keep the unit running with sustainment operations only—identifies a manning level below which the program/project will not sustain the current level of operations.
15. Options and Sensitivity Analysis: The manpower model/process explains trade-offs and how one manning decision may be affected by changes in another manning decision.

Integrated Total Workforce Criteria

16. Funded/Unfunded Billets: Shows all billets and distinguishes between new and old, funded and unfunded.
17. Work breakout (current, future, navy after next): The manpower model/process can break out work by current Navy operations, future Next Navy operations, and Navy After Next operations.
18. Total Billet Count: The manpower model/process accounts for the total workforce (CIV, MIL, CTR) and can trace all billets, by type, to the appropriate end item and intermediate level products.
19. Funding Source: The manpower model/process can distinguish working capital funded billets from mission funded billets.

Leadership Engagement Criterion

20. Leadership investment, influence, and encouragement to individuals to use the systems.

Work accomplished by the DoN Acquisition Workforce (AWF) in the SYSCOMs enables industry partners in the value stream to construct and deliver warfighting systems. Delivering acquisition, modernization, and maintenance of warfighting capability to warfighters is the aim of this civilian-military-industrial enterprise. The outcome is readiness to fight and win.

Visibility for AWF Affordability and Willingness to Pay

Changes in the National Strategy over time have caused cyclical shrinkage and swelling among the ranks of the AWF. Perceptions of AWF affordability fluctuate among stakeholders across time. Robustly managing the AWF and telling a defendable story about its affordability demands the use of strategic thinking, systems thinking, industrial and organizational psychology, management science, engineering, and principles of major program management.

ASN (RD&A) has a responsibility (SECNAVINST 5300.38, 22 July 2009) to ensure Acquisition Workforce (AWF) capabilities and capacity requirements are balanced with workload. Meeting this responsibility occurs in the context of an ever-evolving national conversation about affordability and willingness to pay (the relative balance among risk, need, value, health, and cost). Articulating a more defendable story about AWF affordability is an ongoing aim of the DACM and the ASN (RD&A) directorate as they seek to manage the AWF as a major acquisition program.

Cogent questions include the following: At what point in time are we making an evaluation or a decision about affordability? What life cycle or time horizon are we considering as we make an evaluation or a decision about affordability? What past evaluations and decisions, made with what life cycle or time horizon in mind, caused the current state of perceived affordability? What is our organizational learning approach to document, manage, and learn from the knowledge, assumptions, constraints, and history that led to perceived affordability in the past, now, and in the future?

Some basic economic principles also apply to our discussion of affordability:

- sunk cost (abandoning a previous investment strategy when new information emerges);
- opportunity cost (investments we don’t make because we are fully committed to other investments);

- design cost (80%–90% of life-cycle cost locks in during initial design assumptions);
- do-nothing cost ("kicking the ball down the road" or not investing in favor of awaiting more information is a decision with implications and perhaps unintended consequences);
- irrecoverable cost (a point at which we have missed the opportunity and no amount of money spent can recover what we lost).

AWF affordability is an inextricably interwoven sub-factor of warfighting capability affordability. Using a similar framework, we define terminology for both. These definitions are offered to provoke critical thinking; they are not given as definitively correct.

Affordability (in the case of both warfighting capability affordability and AWF affordability) is defined simply as "congressional willingness to pay." If we as a nation through our elected representatives collectively decide that we are willing to incur the costs of any National Defense Strategy, then that strategy is acceptably affordable.

Warfighting Capability Willingness to Pay is a function of

- perceived ***risk*** levels based on current and future credible threats, prompting a need for national defense.
- the ***need*** for specific numbers of national defense systems, now and in the future.
- the ***value*** placed on national defense, perceptions of which change over time.
- assessed ***health*** of national defense systems, current and predicted future.
- the ***cost*** of national defense, in the current budget, future budgets, and for a 50-year life cycle.

AWF Willingness to Pay is a function of

- perceived ***risk*** levels we incur based on the current and future composition and expertise of the AWF.
- the ***need*** for specific numbers of AWF members, now and over time.
- the ***value*** placed on AWF work getting done, perceptions of which change over time.
- assessed ***health*** of the AWF, current and predicted future.
- the ***cost*** of the AWF, in the current budget and future budgets, and for a 50-year life cycle.

Warfighting Capability Risk is a function of

- the perceived threat levels, the slope of the threat pace curve, and the gap between U.S. capability and threat capability. To continue with North Korea as the example, we thought they were on one trajectory with ballistic nuclear missile capability and it appears now they may be on a steeper curve than we thought. Our willingness to pay may change with that change in calculus.
- our perceived vulnerability, which is in some ways tied to threat pace, threat slope, and threat gap. If we didn't feel vulnerable based on what North Korea was doing, we would behave differently. If we feel threatened, we perceive greater risk and therefore greater willingness to pay.
- whether we have declared war or not. A formal declaration of war is an obvious expression of the degree of nationalu risk we feel.

AWF Risk is a function of

- the likelihood that unfunded acquisition work will delay or diminish warfighting capability.
- the impact of delayed or diminished warfighting capability on readiness to fight and win.
- the likelihood of a critical expertise diminishing beyond the point of no return.
- the impact on future warfighting capability of losing that expertise.

Warfighting Capability Need is a function of

- stated requirements for warfighting capability; the number of ships, aircraft, and vehicles with associated equipment, combat systems, weapons, and ordnance needed to support the DoN's military missions now and in the future.

AWF Need is a function of

- the quantity of AWF work necessary to meet warfighting capability production requirements.
- the AWF manpower needed to perform that quantity of work.
- AWF productivity.

Warfighting Capability Value is a function of

- prevailing risk tolerance levels.
- the political environment.
- decision-maker connection to warfighting. For example, the number of congresspersons who have been in the service and have experienced what it means to be a warfighter influences how Congress deliberates about the value of national defense.
- the degree of decision-making centralization or decentralization that exists in an administration or in Congress.

AWF Value is a function of

- current readiness and capability delivered by previous AWF.
- future readiness and capability achieved by AWF investment today.
- important work being performed today.

Warfighting Capability Health is a function of

- the assessed health of the Naval Enterprise.
- the health of the acquisition workforce.
- the health of the tools.
- the health of the facilities.
- the health of policies.

AWF Health is a function of

- the assessed current health and projected future health of AWF, including dimensions such as capability, capacity, diversity, experience, certifications, and training levels.

Warfighting Capability Cost is a function of

- workforce costs.
- facility costs.
- tool costs.
- policy costs.
- acquired system costs.
- contracting strategies.

AWF Cost is a function of

- AWF size and the associated salary, benefit, and retirement costs.
- training and development costs.

Expressed as conceptual functions,

$\underline{Warfighting\ Capability\ Affordability\ \equiv willingness\ to\ pay}$

and willingness to pay $= f(risk, need, value, health, cost)$

$where$

$risk = f(perceived\ threat\ levels, threat\ pace\ slope, threat\ gap, perceived\ vulnerability\ war\ declaration\ state, \dots)$

$need = f(stated\ warfighting\ requirements, \dots)$

$value = f(risk\ tolerance, political\ environment, decisionmaker\ connection\ to\ warfighting, degree\ of\ decisionmaking\ decentralization, \dots)$

$health = f\ (assessed\ current\ health\ and\ projected\ future\ health\ of\ AWF, industrial\ base, sailor\ training\ systems, energy\ supply, etc\ \dots)$

$cost = f\ (workforce\ cost, facility\ costs, tool\ costs, policy\ costs, acquired\ system\ costs, contracting\ strategies, opportunity\ costs, \dots)$

$\underline{AWF\ Affordability\ \equiv willingness\ to\ pay}$

and willingness to pay $= f(risk, need, value, health, cost)$

$where$

$risk = f(likelihood\ that\ unfunded\ acquisition\ work\ will\ delay\ or\ diminish\ warfighting\ capability, impact\ of\ delayed\ or\ diminished\ warfighting\ capability\ on\ readiness\ to\ fight\ and\ win, likelihood\ of\ a\ critical\ expertise\ diminishing\ beyond\ the\ point\ of\ no\ return, impact\ of\ losing\ that\ expertise\ \dots)$

$need = f(quantity\ of\ AWF\ work\ necessary\ to\ meet\ warfighting\ requirements, AWF\ manpower\ needed\ to\ perform\ that\ quantity\ of\ work, AWF\ productivity, \dots)$

$value = f(current\ readiness\ and\ capability\ delivered\ by\ previous\ AWF,$

$$future\ readiness\ and\ capability\ achieved\ by\ AWF\ investment\ today,$$

$$important\ work\ being\ performed\ today\ \ldots)$$

$$health = f\ (assessed\ current\ health\ and\ \ projected\ future\ health\ of\ AWF,\ldots)$$

$$cost = f\ (workforce\ size, salary\ and\ benefit\ levels, retirement\ obligations,$$

$$training\ and\ development\ cost, opportunity\ costs, \ldots)$$

There are multiple levels of organizational system to which we can apply conceptual thinking about willingness to pay = f (risk, need, value, health, cost).

Visibility for Different Organizational Systems of Interest

Each level of indenture below implies a smaller subset of the national defense domain than the previous level. Zooming in and out from one level to another elicits different views of willingness to pay = f (risk, need, value, health, cost).

I. Joint Staff and the Office of the Secretary of Defense: Joint warfighting capability, readiness and sustainment levels across all services combined, including soldiers, airmen, sailors, and Marines.

   A. The Department of the Navy, the Chief of Naval Operations, and the Navy Secretariat: Naval warfighting capability, readiness and sustainment levels across Navy and Marine Corps combined, including sailors, aviators, and Marines.

      1. Navy warfighting capability, readiness, and sustainment levels, including sailors and aviators.

      2. Marine Corps warfighting capability, readiness and sustainment levels, including Marines.

         a) Assistant Secretary of the Navy, Research, Development, and Acquisition: Research, development, transition, acquisition, sustainment and modernization of warfighting systems (not warfighters).

         b) National Career Field Leaders. Shepherds of the current effectiveness and long term health of the entire acquisition workforce across Program Executive Offices (PEOs) and SYSCOMs.

         c) Chief of Naval Operations: Effectiveness and safety of fleets, type commanders, sailors, and aviators.

         d) Commandant of the Marine Corps: Effectiveness and safety of Marines.

         e) Program Executive Officers and SYSCOM Commanders: Jointly responsible for the set of AWF members under their command and required to use manpower planning models/approaches to convert warfighting demand signals into expected workload for AWF members and therefore project the required size of AWF Career Fields and projected demand signal on each core equity in Naval Warfare Centers.

         f) Naval Warfare Center Commanders: Responsible to maintain minimum threshold capability for each of their assigned core

equities so that the Navy maintains the ability to surge and scale any technology expertise as required.

Leaders and members at lower levels in this hierarchy have different definitions and perceptions of the elements comprising willingness to pay than those at higher levels, and the objective functions and constraints perceived up and down levels may vary greatly.

For example,

- A SYSCOM may have a natural tendency toward an objective function that maximizes the performance of their organization rather than the naval enterprise. Every SYSCOM fights for their mission and warfighting capabilities, maximum fill of their manpower needs, as large an increase in systems and hardware as they can get, and maximum funding for their perceived priorities. SYSCOMs look through a different lens so they have so different objective functions and constraints than the Naval triad. What maximizing performance looks like from a SYSCOM chair differs from an OPNAV chair.
- For a program or person responsible for a mission area, the more they can do in that mission area the more effective they are perceived to be. Maximizing that mission area, however, may not make sense when you look across all the mission portfolios having limited resources that you can invest.
- National career field leaders are charged with improving career field productivity, innovation, and professional and technical excellence. It is at least conceivable that attempts to optimize the performance of one career field will negatively impact the performance of another, and the unintended consequence may be invisible to both national leaders.
- A similar line of thinking applies around service components depending geographically where the conflict is believed to occur, and the type of units required to confront it. We have spent the last 15 years in the desert and the Navy has been the bill recipient or payer for people on land. If North Korea kicks off, it is more a maritime role you are going to see that comes up. So, there is a trade space between Army, Navy, and Air Force, and the next level down you are going to have what level assets and platforms you are going to need to impact trade space options.
- A similar situation applies to Warfare Centers, which have very challenging objective functions. They strive to maintain minimum threshold core equity capability without dedicated mission funding, that is, market and sell core equity products and services to program managers in the hopes there will be enough buyers to maintain the core equity. WFC objective functions and constraints leave much room for well-intended suboptimization.

This line of reasoning leads strongly to a recommendation that future ACC meetings and AWF Summits be conducted in the AWF war room so that Navy leaders may have these trade-off discussions surrounded by more data from the larger system with appropriate context. The model makes for a good acquisition workforce summit discussion about how complex AWF affordability is and how one size does not fit all and it is about having the conversation to understand those impacts.

Visibility for Strategic Options When Exploring the Trade Space

Recall that the aim of developing and exploring this conceptual model is to architect and evaluate possible options for action and for future states and select a preferred way ahead. The options approach considers multiple possible decision pathways in an uncertain environment and allows for making mid-course corrections when new information emerges. Traditional decision models assume a single static decision, while real option analysis assumes a multidimensional series of options where leaders have the flexibility to adapt given feedback loop impacts from previous decisions or a new change in the enterprise ecosystem. If we are in the face of investment or cost decisions, there are at least three sets of options below that we could pursue.

People Levers. Here are some people levers that we as leaders could turn or crank.

1. DAWIA certifications
2. Professional certifications
3. Retention allowance
4. SLRPs
5. Training
6. Hiring
7. Education
8. Government rotations
9. Industry rotations
10. Transition & retrain
11. Partner with other government/industry
12. Job swaps
13. LDPs
14. Succession planning
15. Mentoring
16. Recognition
17. Rewards Shaping through early outs: VSIP/VERA

Workload Levers. Here are some things we could do with workload.

1. Better tools
2. Accelerated acquisition
3. Change ACAT level
4. Reduce documentation requirements
5. Better Buying Power guidance
6. Commonality
7. Redundancy

Tool Levers. Here are some tool levers that we could invest in.

1. Talent management
2. DCPDS
3. eDACM 2.0
4. DAWIA Operating Guide revision
5. AWTAP

6. DAWDF
7. ACQ Demo
8. AWQI
9. Career navigators
10. USC Title X Chapter 87 1701-18xx

Visibility for Career Navigators, Career Guides, and Career Paths

Equipping AWF members and leaders with useful tools to envision several possible alternative career progressions provides a tremendous benefit to the individual and to the Navy. DACM has developed a Career Navigator tool that for that purpose. Career Navigator provides at-a-glance guidance regarding eight key dimensions of a career (see Table 1) across time, spanning from Entry and Journeyman to the Expert and Senior Leader phases.

Table 1. Career Navigator Dimensions

Career Navigator Dimensions	
1. Life Events	Chart the major changes in status or circumstances (e.g., marriage, divorce, death of a spouse) and understand how these changes may affect your career.
2. Results & Awards	Document major professional accomplishments and honors to see if you are tracking toward your goals.
3. Experience/Roles	Visualize how you have grown professionally and if you have been/are/will be in the right roles at the right time.
• RDA Level & Above	Plan your long-term goals.
• Broadening	See how you can expand outside of your main skills domain.
• Within Domain/SYSCOM	Chart your course within your domain/SYSCOM
• Military or Industry	Both military and industry experience can play key roles in career development.
4. Mentoring	Outline your mentor/mentee experience and intentions
5. Certifications	Plan and track certifications required to keep you on track to your career goals
6. Training	Plan and track training that will keep you at the fore of your career field.
• Technical	Manage training for technical aspects of your career
• Professional	Plot training such as: management, team building, soft skills, communications.
• Personal Development	Track training designed to improve personal development such as interpersonal skills, organizational skills, and motivational skills.
7. Education	Track how degrees from DAU and other institutions of higher learning can augment your career success.
8. Character	Document milestones in your career that built and attest to your character.

The Career Navigator tool can help guide people in journaling their respective career paths; envisioning positions they might want to hold in the future; developing actionable plans to become competitive for those positions; and tracking progress. It is a planning tool for career steering regardless of career field, current position or years of experience. Anyone can use it, both inside and outside the AWF, since the principles upon which it stands are universally applicable. Additionally, each national career field leader is chartered to provide career path guidance within their career field.

Visibility for Measures of AWF Health

There are thousands of measures (metrics) that have been used or can be used to assess an organization's workforce "health." Industry and government leaders often find it challenging to select the best portfolio of workforce measures that provide the information

that they need to make good data-based strategic and operational workforce management decisions without overburdening the organization with research, data mining, and reporting requirements. There is no magic list of the best workforce health measures; however, there are frameworks that can help.

The Human Capital Management Cycle Framework

The Human Capital Management Cycle Framework defines a healthy workforce as one that is productive, innovative, and excellent as a result of the program/organization/career field successfully executing the critical human capital management processes associated with each phase of the human capital management cycle and achieving the end goals associated with each phase (see Figure 2). "Employing Measures in Managing Acquisition Workforce Health" begins by defining the phases of the human capital management cycle, the specified end goal statements for each phase, and key human capital management processes that are performed in each phase. The end goal statements are a starting point for program/organization/career field leader discussions; leaders may choose to tailor the current statements or adopt new end goals to best fit their organizations if desired. In the Human Capital Management Cycle Framework, measures of the quality and timely execution of the key human capital management processes (or progress status of processes that are being developed but have not been fully implemented) associated with each phase are predictive of the likelihood that the phase end goal will be achieved. The measures associated with the end goals taken at the end of the established goal time-period are the resulting lagging measures.

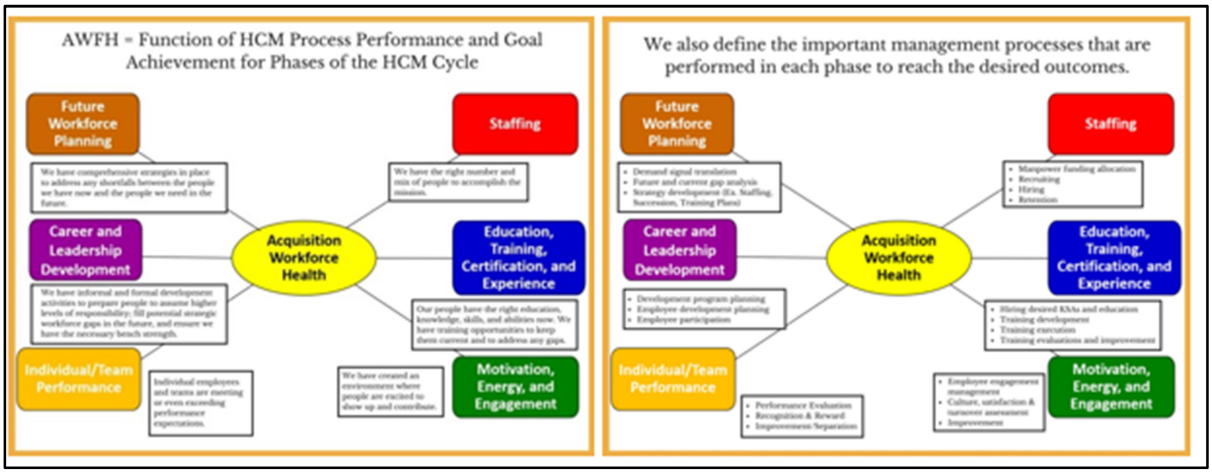

Figure 2. Human Capital Management Cycle Framework

The Enterprise Performance Measurement Framework

Leaders typically limit assessment of their organization's workforce health to evaluating how well the program/organization/career field performed internal human capital processes to achieve internal human capital goals; the Human Capital Management Cycle Framework. The Human Capital Management Cycle Framework alone is an adequate approach; however, a measurement system based on the Enterprise Performance Measurement Framework accounts for various factors outside of internal human capital process performance that may influence an organization's human capital goal achievement and workforce health. The Enterprise Performance Measurement Framework also attempts to provide assurance that the workforce is delivering desired results to support the organization's external customers/stakeholders and the enterprise mission; the driving purpose for the workforce and an organization to exist. Assessing workforce health from the

larger Enterprise Performance view instead of from the narrow internal perspective of the Human Capital Management Cycle Framework only results in leaders developing internal human capital goals and metrics that are aligned with both higher level plans/goals and customer/stakeholder needs. In addition, the enterprise perspective helps leaders focus the organization's attention and energy on changing internal processes and external factors that are within their span of control to improve organization workforce health. An enterprise view also provides leaders with a measure of assurance to help determine whether current and future levels of workforce capacity and capability are adequate to meet customer product and service requirements. Finally, an Enterprise Performance Model–based metrics portfolio enables individual organizations to better articulate how their human capital process performance, trade space decisions, and ultimately their workforce's performance, innovation, technical excellence, and professional excellence contributed to overarching enterprise mission accomplishment.

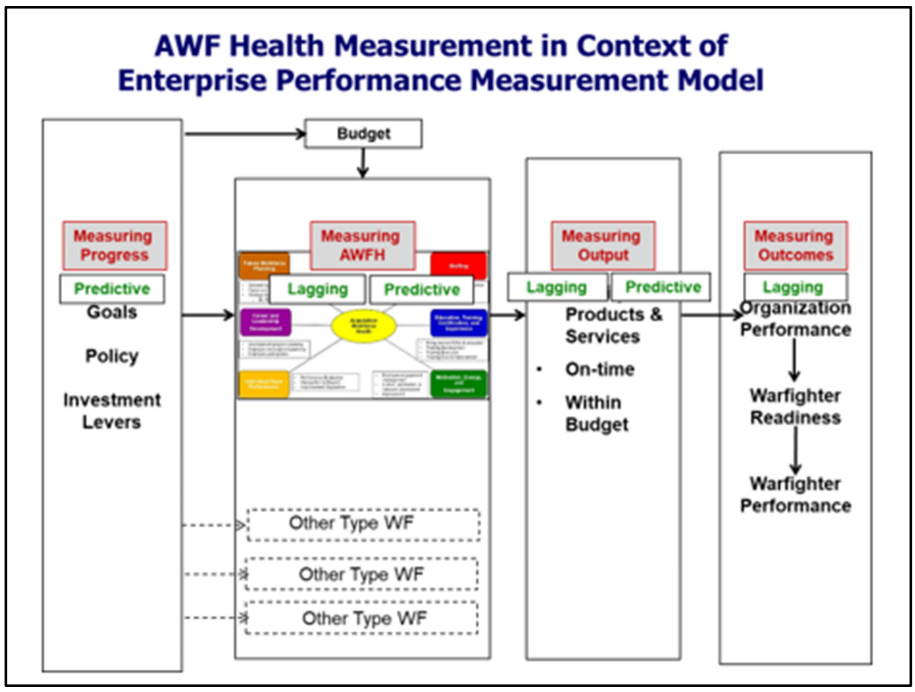

Figure 3. Enterprise Performance Measurement Model

The DoN Acquisition Workforce Health Measure Framework (in Context of National Strategy and Warfighting Performance)

Finally, the presentation concludes with the description of a proposed Department of the Navy Acquisition Workforce Health Measurement framework based on the Enterprise Performance Measurement Framework discussed in the previous section. The framework depicts "real world" elements that impact the management of Navy Acquisition organizations and the Navy Acquisition workforce, actual products and services that acquisition organizations produce and deliver, and a representation of the various customers that use acquisition products and services to ultimately ensure warfighter readiness and support warfighters on the battlefield, in the air, and at sea. The framework begins with the U.S. national strategy as the linchpin that informs DoD and DoN strategic direction, plans, goals, and funding allocation decisions. Strategic-level acquisition organizations develop policy, budget plans, execution plans, and various initiatives to guide lower-level organizations in accomplishing their mission to help the Navy enterprise achieve DoN, DoD, and ultimately

U.S. strategic objectives. The framework acknowledges that most organizations that perform acquisition work for the Navy not only have to manage the challenges associated with an acquisition professional workforce, but also other related professional workforces (research and development, maintenance, support, and others) that may have similar or different goals, objectives, and needs. The Navy acquisition organization's workforce produces specific products and provides specific services that contribute to the successful development, purchase, deployment, and sustainment of ships, submarines, vehicles, weapons, information technology, and other equipment used to ensure the U.S. Navy's readiness to fight. These resources are employed by combatant commanders, sailors, marines, soldiers and airmen to win the fight.

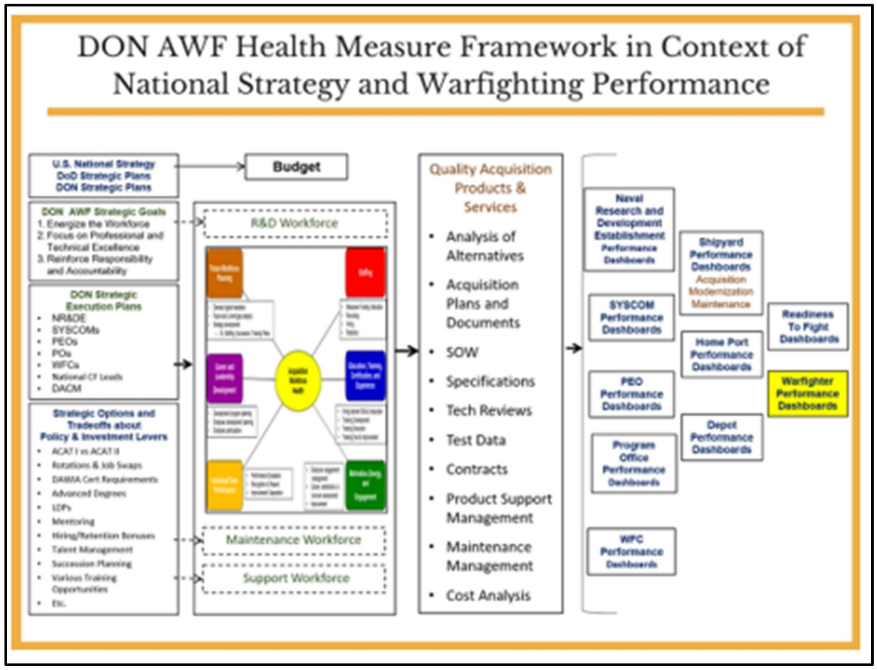

Figure 4. DoN AWF Health Measurement Framework

As depicted in the Enterprise Performance Measurement and associated DoN Acquisition Workforce Health Measurement frameworks, the same workforce health measures may be both predictive and lagging depending on the context in which they are used. A measures portfolio based on these frameworks assumes the following:

1. Measurement results of an organization's progress in implementing external human capital plans, policies, and initiatives levied by a higher headquarters or outside agencies (e.g., OPM, DoD, DoN, Congress, etc.) and the amount of funding allocated are predictive of the organization's level of internal human capital cycle process performance and end goal achievement;
2. Measurement results of an organization's internal human capital cycle process performance and end goal achievement are lagging measures of an organization's progress in implementing external human capital plans, policies, and initiatives levied by a higher headquarters or outside agencies, yet at the same predictive of the organization's capability to consistently deliver quality products/services within the time required by customers/stakeholders and within budget

3. Measurement results of an organization's product/service quality, timeliness, and cost are lagging results of human capital cycle end goal achievement, but also a predictive measure of the organization's external customer/stakeholder's performance satisfaction and success and enterprise mission accomplishment.

A lagging measure of total AWF population can be predictive of the organization's likelihood to achieve adequate levels of personnel in the Critical Acquisition Position (CAP) workforce. In turn, total CAP population measures may allow leaders to predict if the Key Leadership Position (KLP) workforce will be adequately staffed to meet customer demands. The total population of each category of workforce is driven by hiring and retention. Therefore, measures of the success of hiring processes, staff addition rates, departure rates, promotion rates, and retention rates would all be examples of predictive measures used to assess the organization's progress toward meeting desired total population goals in each category. In the context of the Enterprise Performance Measurement and associated DoN Acquisition Workforce Health Measurement frameworks, measures of an organization's implementation of strategic initiatives aimed at improving hiring efficiency and increasing retention would be predictive of the likelihood that the organization would achieve total population goals in each category. The lagging total population results in each category would then be predictive of the likelihood that the acquisition products delivered by the organization would meet customer quality and timeliness expectations. The lagging product quality and timeliness measures (e.g., voice of the customer survey feedback, frequency of meeting product quality and delivery timelines specified by law, policy, or customer demand, etc.) then become predictive measures used to proactively assess the organization's impact on overarching mission and warfighter success.

Closure

The DoN Director, Acquisition Career Management (DACM), has created paper-based and digital war rooms to promote ready, relevant lateral learning across programs and career fields so that SYSCOMs, PEOs, national career field leaders, and their teams can move smartly and systematically toward managing the 60,000-member acquisition workforce like a major acquisition program.

For Further Study

DACM is rapidly exploring innovative ways to promote

- More emphasis on defining and measuring Program and AWF outputs and outcomes
- Judicious application of system dynamics models to appropriate problem sets in all career fields
- Continued exploration of workload forecasting models tied to changing demand signals from the 30-year shipbuilding plan
- Development of talent management systems and toolsets to shape and manage AWF composition
- Transition to Virtual War Rooms with shared data display across multiple geographies
- Understanding the half-life of knowledge and the refresh rate required to maintain currency
- Defining the characteristics of a fully developed professional in all career fields

- Better defining the pool of candidates available for succession planning purposes
- Better understanding the qualities needed in key people, beyond technical training.

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